KENTUCKY DEPARTMENT OF EDUCATION
PUPIL TRANSPORTATION BRANCH
POSITION STATEMENT

Transporting Oxygen on School Buses

Oxygen is an accelerant and therefore inherently hazardous. It is not a fuel but it is a necessary component for combustion. Materials that are normally not flammable become highly flammable in an oxygen enriched environment. Oxygen should only be carried on a bus when medically necessary and specified in the students IEP. Each local school district is responsible for making the decision of transporting oxygen on their district buses. Determination of need and planning for contingencies should be done with the cooperation of the school nurse or other trained medical personnel.

Oxygen may be carried on the bus in small quantities such as portable units weighing 15 pounds or less. Transportation of oxygen should be restricted to special needs buses that have a monitor available to assist the student in properly securing the cylinder for transport. Personnel assigned to assist these students should be trained in the proper handling of oxygen by the school nurse or the oxygen supplier. Additional oxygen supplies should be delivered directly to the school by the oxygen supplier and not transported on the bus.

All oxygen cylinders must be safe guarded to avoid the possibility of valve breakage and the sudden loss of pressure. Because it is stored under high pressure and in some cases, liquid form, a large release of oxygen into the atmosphere may cause frostbite. Training in the proper use of valves and regulators is necessary to avoid accidents.

Cylinders must be secured to avoid the possibility of the cylinder becoming a missile in an accident. Cylinders lying on their side have a tendency to freeze and fail to function properly. All cylinders must be secured in an upright position in a substantial bracket capable of sustaining five times the weight of the cylinder and its contents. This bracket should be supplied by the cylinder manufacturer and mounted to a sidewall in an area that is not inside the side impact or head impact zone of a regular education seat. If the cylinder remains attached to the wheel chair it must be attached in such a way as to resist a force of at least five times its weight in any direction.

Heater motors produce a small spark at their brushes. Heater cores collect dust, lint and other debris as a result of the large volumes of air that pass between the heat exchanging fins. As a regular part of the bus maintenance program, the heater cores on these buses must be cleaned to remove any potential fuel source such as lint, hair, etc. Oxygen cylinders should not be mounted within five feet of heaters, lift motors, or other electrical devices. The greater distance allows the oxygen to dissipate safely.

Oxygen is slightly heavier that the other components of air and has a slight tendency to pool in low areas. Circulating air will override this tendency but oxygen canisters should

not be left on buses when not in use. The interior temperature of a bus during the day may exceed 140 degrees. Additionally, if cylinders are left unattended they may be subject to vandalism.

An alternate plan for transporting the student in case of mechanical breakdown should be in place before beginning transport. Special consideration should be given to emergency evacuation. The monitor should be trained to assist the student in egress and handling the oxygen in an emergency situation. Two-way communications should be available so that in case of equipment malfunction or emergency assistance will be available. Alternate oxygen supplies should be located at the school or bus garage to allow quick response if there is an equipment failure or emergency. Proper handling and storage of these supplies should be in compliance with the State Fire Marshals recommendations.